

Title (en)
Image pickup device and portable terminal equipped therewith

Title (de)
Bildaufnahmevorrichtung und damit ausgestattetes tragbares Endgerät

Title (fr)
Dispositif de prise d'images et terminal portable équipé avec ce dispositif

Publication
EP 1408556 A2 20040414 (EN)

Application
EP 03021463 A 20030923

Priority

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- JP 2002347349 A 20021129
- JP 2002347696 A 20021129

Abstract (en)
An image pickup device having therein a base board on which an opening portion is formed, an image pickup element that is attached on the reverse side of the base board so that at least a part of the opening portion may be covered, an optical member that is attached to be in contact with the surface of the image pickup element, from the surface side of the base board through the opening portion, and converges incident light on the image pickup element, and an outer frame member that is mounted on the base board to cover the optical member and the opening portion.

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H01L 31/0203; **H01L 31/0232**

IPC 8 full level
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Citation (applicant)

- EP 1223749 A1 20020717 - KONISHIROKU PHOTO IND [JP]
- EP 1148716 A1 20011024 - MITSUBISHI ELECTRIC CORP [JP]
- FR 2822326 A1 20020920 - ATMEL GRENOBLE SA [FR]

Citation (examination)

- FR 2822326 A1 20020920 - ATMEL GRENOBLE SA [FR]
- EP 1180718 A1 20020220 - EM MICROELECTRONIC MARIN SA [CH]

Cited by
EP1986420A3; US8034652B2; US8587718B2; EP1986420A2

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EP 1408556 A2 20040414; **EP 1408556 A3 20090211**; CN 100534148 C 20090826; CN 1501696 A 20040602; KR 100991063 B1 20101029; KR 20040027377 A 20040401; TW 200425489 A 20041116; TW I305956 B 20090201; US 2004061799 A1 20040401

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